

IN THE CLAIMS

Please amend the claims as follows:

1. (original) A method for producing a blank for a component of laser active quartz glass, comprising the following steps:

- a) providing a dispersion with a solids content of at least 40% by wt. which contains SiO₂ nanopowder and dopants, including a cation of the rare earth metals or of the transition metals in a liquid,
- b) granulation by moving the dispersion with withdrawal of moisture until the formation of a doped SiO₂ granulate of spherical porous granulate grains having a moisture content of less than 35% by wt. and a density of at least 0.95 g/cm³,
- c) drying and purifying the SiO₂ granulate by heating to a temperature of at least 1000°C with formation of doped porous SiO₂ granules having an OH content of less than 10 ppm, and
- d) sintering or melting the doped SiO₂ granules in a reducing atmosphere with formation of the blank of doped quartz glass, including a gas pressure sintering, which comprises the following steps:
 - aa) heating the SiO₂ granules to a melting temperature of at least 1600°C while applying and maintaining a negative pressure;
 - bb) holding at the melting temperature at an overpressure ranging from 5 bar to 15 bar for a melting period of at least 30 min with formation of the quartz glass blank;
 - cc) cooling the quartz glass blank while maintaining an overpressure.

2. (original) The method according to claim 1, characterized in that an initial solids content of at least 50% by wt. is set in the dispersion.
3. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that the SiO₂ granulate obtained according to step b) has a BET surface area ranging from 40 m²/g to 70 m²/g.
4. (original) The method according to claim 3, characterized in that the SiO₂ granulate obtained according to step b) has a BET surface area of at least 50 m²/g.
5. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that the spherical porous granulate grains have a grain size of less than 500 µm.
6. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that the SiO₂ granulate is dried and purified under a chlorine-containing atmosphere.
7. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that the SiO₂ granulate is dried and purified at a temperature of at least 1050°C.
8. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that drying and purifying of the porous granulate is performed under an oxygen-containing atmosphere.
9. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that the porous SiO₂ granules obtained according to step c) have an OH content of less than one wt ppm.

10. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that the porous SiO₂ granules obtained according to step c) have a BET surface area of less than 20 m²/g.
11. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that the SiO₂ granules are thermally densified prior to step d).
12. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that the quartz glass blank is annealed at a temperature of at least 1120°C for a retention period of at least 40 h.
13. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that the SiO₂ granules according to step d) are molten in a mold.
14. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that the SiO₂ blank according to step d) is three-dimensionally homogenized.
15. (currently amended) The method according to claim 1 [~~any one of the preceding claims~~], characterized in that a bulk body with a radially inhomogeneous refractive index distribution is formed from SiO₂ granules of different refractive index, and that the bulk body is sintered or molten to obtain the SiO₂ blank.
16. (currently amended) Use of an SiO₂ blank obtained according to a method as claimed in claim 1 [~~claims 1 to 15~~], as a core material for a fiber laser, as an optical filter or as a cladding tube for laser.